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ABSTRACT

This study reviews and synthesizes research on factors that are correlated with school effectiveness. Effectiveness may be determined by high achievement on standardized tests; low rates of violence, vandalism, delinquency, and behavior problems; and high attendance. Indicators of effectiveness encompass two levels, classroom and school. Schools that are effective spend more time on task and have a principal who supports an academic focus. Research indicates that a school's social processes (consensus building, modeling, and feedback) determine whether a school will perform above expectations. When students perceived the results of faculty-administration consensus on academics and discipline to be fair, firm, and consistent, school outcomes were better than expected. The dominant model in the school is the principal, his or her behavior will influence students. Consistent feedback which recognizes and supports success is also a significant factor in school effectiveness. The findings further suggest that two fundamental beliefs are correlated with student achievement: student belief that their actions will affect their future, and teacher belief that each child can succeed. (Author/JK)

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CHARACTERISTICS OF EFFECTIVE SCHOOLS: THE IMPORTANCE OF SCHOOL PROCESSES

by

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CHARACTERISTICS OF EFFECTIVE SCHOOLS:
THE IMPORTANCE OF SCHOOL PROCESSES

By David A. Squires

Pick a school you know, then ask:

Do participants in the school -- administrators, teachers, and students -- believe their actions can affect the future?

Are expectations for success reinforced in routines of administrators, teachers, and students?

Has a consensus developed around patterns of acceptable behavior and around the academic emphasis of the school?

Does the school have a focus which enlists the participation and commitment of administrators, teachers, and students?

Is the social structure of the school organized to provide models of appropriate behavior, attitudes and beliefs?

Does the principal take an active role in structuring and maintaining the school's instructional program and disciplinary procedures?

Does feedback to school participants on leadership initiative, rewards and punishment support success?

Your answers could very well tell whether or not the school you picked is effective; that is, how well its students do on standardized tests, how much they attend school, how many disciplinary problems occur, and how much violence, vandalism, and delinquency there is.

Although research on effective classrooms is abundant, few studies have examined the influence of the school as a whole on student outcomes. Yet, what research there is indicates that a school's processes, norms and values as a social institution do make a significant difference. We review here what we think are the best of these studies.

The studies were chosen because they used a wide variety of methodologies, were relatively well-known and accessible, and attempted to associate a wide variety of variables to schooling outcomes.

We would like to stress that results reported here are based on either correlational studies or descriptive case studies, and therefore, causation cannot be inferred. Still, the consistency across studies using various methodologies is strong enough for this line of research to merit a closer look, particularly as it provides a potential body of knowledge for those who make school policy.

Nor is this research review intended to be comprehensive. Rather, the purpose of this paper is to frame questions based on the research which, when answered, identify areas where schools are effective and/or where they could improve. Discussion is organized around input, process, and outcomes. Most variables researchers look at fit under one of these terms. For example:

INPUT	PROCESS	OUTCOME
SES Status	Teachers jointly planned courses.	Standardized Test Scores
IQ	High proportion of students hold leadership positions.	Student Behavior
Size	Administration checks that teachers assign homework.	Attendance, Delinquency, Violence, Vandalism

We begin by summarizing studies which ask, "What inputs generally affect a school's outcomes?" Then, we review research which suggests that a school's processes are related to its outcomes. In the third part of

this paper, we summarize a longitudinal study which confirms this relationship between processes and outcomes. In the fourth part, descriptions of effective schools by journalists test some conclusions of the more rigorous research. Throughout, we highlight questions derived from the research to stimulate thought on characteristics of effective schools. Then, in the last part of the paper, we cluster the questions into groups and propose a way to discuss their implications for policy makers.

The Search for Input-Output Relationships

During the fifties and sixties, educational research focused on relationships between a school system's inputs and outcomes. These studies were generally large scale and tended to concentrate on areas which could be easily quantified. (Averch, 1974, reviews a substantial amount of this research. Bridge, Judd, and Moock, 1979, review research done more recently.)

Input conditions were generally such things as the number of books in the library, amount of leader experience and/or college preparation of school staff, the availability of instructional materials, the dollars spent on instruction and administration, and the SES level of students. On the output side were such things as grades, entrance into college, drop-out rates, SAT scores, and achievement test results. If research found a significant association between input measures, such as dollars spent on instruction, and outcomes, like student grades or college acceptance rates, the results could become the basis for recommending that more money or more emphasis be placed on particular aspects of the schooling.

James Coleman (1966) conducted perhaps the best known study in this area. Basically, he found no significant relationship between the inputs and outputs he examined, with the exception of socio-economic-status (SES), which did tend to show a high correlation with pupil performance. Coleman wrote, "Only a small part of variation in achievement is due to school factors. More variation is associated with the individual's background than with any other measure" (p.7). The input conditions of a school's physical plant, its services, extra curricular activities, and characteristics of teachers and principals did not appear associated with students' achievement.

There are three common interpretations of Coleman's findings:

- Despite all the resources put into schools, they are not able to affect student achievement. Therefore schools should receive fewer resources.
- If SES is what makes a difference, then the rich get richer, the poor, poorer, and the schools perpetuate and reinforce the American class system.
- What was studied did not appear to make much difference, with the exception of SES. Therefore, other aspects of schools should be examined.

By now, the furor and debate has subsided and most educators and researchers have embraced the third option. The search needs to focus on other school characteristics.

We should add a footnote to this review of Coleman, though. In addition to SES, Coleman also found that student attitudes showed the strongest relationship to achievement. Student attitudes were divided into three components: interest in learning and reading, self-concept, and

environmental control. Of these three attitude components, "the child's sense of control of environment is most strongly related to achievement" (p. 320). Thus, students who feel that luck is more important than hard work, and that something or somebody is stopping them when they try to get ahead, are less likely to succeed in school than those who believe otherwise. Two questions which arise from these findings are:

Do students believe that luck is more important than hard work?

Do students believe that they can get ahead without something or someone stopping them?

To summarize, Coleman found that the beliefs and attitudes of students and their SES most strongly related to their achievement in school.

The Search for Process-Outcome Relationships in Schools

The Coleman Study indicates that the most easily measured characteristics of school context, with the exceptions of SES and student attitude, are not associated with student outcomes. This suggests that something in the environment influences those attitudes. The review of studies in this section attempts to track down those influences.

The studies in Violent Schools-Safe Schools: The Safe School Study Report to Congress (1978) seek process factors associated with school violence and vandalism. Our review here links school effectiveness with low amounts of violence and vandalism.

A random sample of urban, suburban, and rural schools from across the United States found 15 factors associated with the extent of crime in a given school. The authors organized these factors into six closely

related themes. "Taken together, they suggest a set of overall process goals that schools should work to achieve" (p. 132). These themes provide the basis for our questions, which, when answered point the way to effective schools. Most of the themes have to do with a school's processes, rather than the influence of community factors. According to our paradigm, the study found:

INPUT	PROCESS	OUTCOMES
Rural	Impersonality	Violence
Suburban	Systematic School Discipline	Vandalism
Urban	Arbitrariness and Student Frustration	
	Reward Structure	
	Alienation	

One theme arising from the factors is that the size and impersonality of a school are related to school crime.

- Large schools have greater property loss through burglary, theft, and vandalism; they also have slightly more violence.
- The more students each teacher teaches, the greater the amount of school violence.
- The less students value teachers' opinions of them, the greater the property loss. (p. 132)

In larger schools, it is more likely that students can "slip through the cracks" and go unnoticed. Furthermore, this effect may be increased if teachers are instructing large classes. In addition, in an impersonal school where there is little contact between teachers and students, students

are less likely to be affected by teachers' opinions. We will return to the effect of teachers' opinions and expectations later in the paper. For now, one question arises.

Do teachers have extensive contact with a limited number of students in several aspects of their education?

Three factors suggested the study's second theme -- systematic school discipline:

- Student reports of strict enforcement of school rules and strict control of classroom behavior are associated with lower levels of school property loss.
- Student perceptions of tight classroom control, strictly enforced rules, and principal's firmness are associated with low levels of student violence.
- Reports by the teachers of strong coordination between faculty and administration are associated with a lower level of property loss. (p. 133)

Perceptions of coordinated discipline and tight classroom control may indicate that there is enough social interaction among school participants for a consistent disciplinary policy to be developed and carried out. Also, students are likely to perceive this consistency in the principal's firmness and teachers' tight classroom control. These findings suggest the following questions:

Has the principal built shared expectations and strong coordination about school rules?

Do students perceive congruence among the faculty in enforcing school rules and strictly controlling classroom behavior?

The third theme -- arbitrariness and student frustration -- suggests that student crime results when students perceive rules to be arbitrarily

enforced by an unnecessarily punitive staff. The study points out that:

- Schools where students complain that discipline is unfairly administered have higher rates of violence.
- Schools where teachers express authoritarian and punitive attitudes about students have greater amounts of property loss. (p. 134)

These two factors tend to exist in schools that have a weak or lax disciplinary policy. Such a policy may lead to students' feeling unfairly singled out for punishment which, in turn, tends to increase crime. Teachers then see students as unruly and begin to develop unfavorable attitudes toward students. The cycle of frustration escalates and ends up in violence and property loss. This suggests the following questions:

Do students perceive that discipline is unfairly administered?

Does faculty express punitive or authoritarian attitudes toward students?

The fourth theme emphasizes the importance of a school's reward structure. Four factors appear related to violence and property loss.

- Schools where students express a strong desire to succeed by getting good grades have less violence.
- Schools where students express a strong desire to succeed by getting good grades have more property loss.
- Schools where students have a strong desire to be school leaders have greater property losses.
- Schools where teachers say they lower students' grades as a disciplinary measure have greater property losses. (p. 135)

The last three factors indicate that an emphasis on getting grades decreases violence, but increases vandalism. The authors describe this syndrome as "a situation in which the competition for rewards is intense,

the availability of rewards is limited and the unfair distribution of rewards is prevalent. These students care about the rewards of the school but see the rewards being unfairly distributed; they react by attacking the school." (p. 135) This raises the following question:

What are the varieties of ways that students can be rewarded, and are the rewards earned by a large number of students?

Rewards here can go beyond the academic rewards of grades. For example, being on a football team or in the band is explicit recognition, and therefore a possible reward for special talent.

The fifth theme, alienation, appears to encompass many of the other themes that went before. The authors define alienation as "the breakdown of the social bond that ties each individual to society" (p. 136). One of the study's major findings touches upon this concept directly.

- Student violence is higher in schools where more students say that they cannot influence what will happen to them -- that their future is dependent upon the actions of others or on luck, rather than on their own efforts (p. 136).

We previously reported that Coleman also found that a sense of efficacy, of having control over one's destiny in the world, was strongly related to academic achievement. We believe that this sense of being connected to the larger society (and for children this means being a "part" of a school) is the most significant finding of these large scale studies.

The importance of this finding is, in a sense, unexpected, considering the thousands of variables that were studied. Nevertheless, its implications for the school as a social institution appear to signal a need to weave students, faculty and administration more fully together into the

fabric of the school and to let personal interactions demonstrate to students their ability to affect the environment. The following two questions emerge:

To what extent do students, faculty, administration and the community feel that their own efforts govern their future?

Does the social structure of the school teach those who live there that their actions have some effect?

The second group of studies in this section examines school processes while controlling SES variables in order to discover which of those processes were associated with higher student achievement outcomes. Researchers first aggregated outcome data by schools, then grouped the schools into categories according to students' SES, and finally examined processes in high and low achieving schools within the SES categories that may account for achievement differences. The research concentrated on school level variables. The chart below summarizes this strategy.

INPUT	PROCESS	OUTCOME
Control SES	What processes make the difference?	High achieving school Low achieving school

Interestingly, a number of these studies were conducted on states' initiative -- in Maryland, New York, Michigan, Delaware, Pennsylvania, and California for instance.

Findings did show differences among schools with students from the same SES levels. The example below, from Brookover et al., (1979) gives some results of these high-low comparisons.

Our data indicate that high achieving schools are most likely to be characterized by the students' feeling that they have control, or mastery of their academic work and the school system is not stacked against them. This is expressed in their feelings that what they do may make a difference in their success and that teachers care about their academic performance. Teachers and principals in higher achieving schools express the belief that students can master their academic work, and that they expect them to do so, and they are committed to seeing that their students learn to read, and to do mathematics, and other academic work. These teacher and principal expectations are expressed in such a way that the students perceive that they are expected to learn and the school academic norms are recognized as setting a standard of high achievement. These norms and the teachers' commitment are expressed in the instructional activities which absorb most of the school day. There is little differentiation among students or the instructional programs provided for them. Teachers consistently reward students for their demonstrated achievement in the academic subjects and do not indiscriminately reward students for responding regardless of the correctness of their response.

In contrast, the schools that are achieving at lower levels are characterized by the students' feelings of futility in regard to their academic performance. This futility is expressed in their belief that the system functions in such a way that they cannot achieve, that teachers are not committed to their high achievement, and that other students will make fun of them if they actually try to achieve. These feelings of futility are associated with lower teacher evaluations of their ability and low expectations on the part of teachers and principals. The norms of achievement as perceived by the students and the teachers are low. Since little is expected and teachers and principals believe that students are not likely to learn at a high level, they devote less time to instructional activity, write off a large proportion of students as unable to learn, differentiate extensively among them, and are likely to praise students for poor achievement. (p. 143-144).

Our questions, taken from the Brookover description, ask those who are concerned with effective schools to look at how the social structure reinforces positive expectations.

Do students master the academic work?

Do students feel the school helps them to master the academic work?

Do principals and teachers believe and expect that students can master their academic work?

Do teachers and principals support the academic focus of the school by spending most of the school day on instructional activities?

Do teachers provide rewards for actual achievement?

Is there little differentiation among students or in the instructional program provided for them?

In Brookover's descriptions there is a shift in perspective from the material aspects of the school -- dollars spent, years of training, curriculum materials -- to a cluster of attitudes and perceptions. For example, students believe that what they do will make a difference; teachers and principals expect students to succeed; the role of the principal emerges, as it did in the Safe Schools Study, as an important factor in effective schools.

Austin (1979), in summarizing studies of high-low schools, found the principal's role to be important in supporting the belief systems held by teachers and students:

- Strong principal leadership (for example, schools "being run for a purpose rather than running from force of habit").
- Strong principal participation in the classroom instructional program and in actual teaching.
- Principals felt they had more control over the functioning of the school, the curriculum, and program staff.

Wellish et al. (1978) found that administrators in schools where achievement was improving were more concerned with instruction, communicated their views about instruction, took responsibility for decisions relating to instruction, coordinated instructional programs through regularly discussing and reviewing teaching performance, and emphasized academic standards.

Weber et al., in examining four inner city schools which were successful in teaching children to read, found eight factors which affected reading achievement: strong leadership, high expectations, good atmosphere, strong emphasis on reading, additional reading personnel, use of plans, individualization, and careful evaluation of student progress. All of these factors are usually under the direct control of the principal.

Certainly there are other studies which support strong leadership: Edmonds (1978), Felsenthal (1978), Irvine (1979), McLaughlin and Marsh (1978) are a few. The Safe Schools Study also reported

the data point to the principal and the school administration as the key element. An effective principal who has developed a systematic policy of discipline helps each individual teacher to maintain discipline by providing a reliable system of support, appropriate inservice training for teachers, and opportunities for teachers to coordinate their actions (p. 137).

A number of questions emerge from these findings:

Does the principal have a purpose in mind when running the school?

Does the principal emphasize academic standards?

Does the principal provide a reliable system of support, appropriate inservice training for staff and opportunities for staff to coordinate their actions in the areas of instruction and discipline?

Does the principal regularly observe classrooms and confer with teachers on instructional matters?

A Longitudinal Study

The next study, Fifteen Thousand Hours, by Rutter et al. (1979), is more sophisticated than the previous studies reviewed in that it tracks

the performance of 12 London inner city schools over a period of five years. The study controls SES and examines four outcomes: achievement, attendance, student behavior and delinquency. Again, it concludes that school processes -- the characteristics of a school as a social organization -- influence the school's effectiveness.

The study's components are categorized in our paradigm below.

INPUT	PROCESS	OUTCOME
Control for SES	Academic emphasis Skills of leaders Teachers' actions in lessons Rewards and punishments Pupil conditions Responsibility and participation Staff organization	Achievement Attendance Student behavior Delinquency

Rutter and his colleagues suggest that the formation and maintenance of a social group, with norms and values that support the purpose of the school, may be the most important resource a school possesses. In addition, they suggest ways in which classrooms affect a school's norms and values. Because this study is powerful in its implications, as well as conceptually elegant in its design, we have chosen to discuss its conclusions in more depth.

All 12 schools that Rutter studied had relatively similar students, (input variables), but produced very different outcomes in terms of (1) academic attainment on exams, (2) student behavior in school, (3) attendance, and (4) delinquency. Upon finding that school processes differed from school to school, Rutter hypothesized that these different processes influenced differences in outcomes. Further, the school

processes which influenced the differences were, for the most part, under the control of teachers and administrators. (Note how far we've come from Coleman's findings reviewed in the first part of this paper.)

General findings of Rutter's five year study are summarized below.

- Variations were partially related to student intake, namely, where there were a substantiated nucleus of children of at least average intellectual ability, students generally scored higher on the tests. Delinquency rates were higher in those schools with a heavy preponderance of the least able. However, the differences in intake, while effecting outcomes, did not effect school processes.
- The variations between schools were stable for five years and were not related to physical factors.
- Better than average schools tended to perform highly on all outcome measures.
- The differences between schools were systematically related to their characteristics as social institutions. These characteristics, the most significant of which are listed below, can be modified by teachers and administrators.
 - academic emphasis
 - skills of teachers
 - teacher actions in lessons
 - rewards and punishments
 - pupil conditions
 - responsibility and participation
 - staff organization

The measurement of seven characteristics of effective schools provide further insight into what Rutter means by school processes. These are listed in the table on the following page. Each measure is significantly associated with one or more outcome areas. So, school processes appear to effect school outcomes.

MEASURES AND SCHOOL PROCESSES
ASSOCIATED WITH SCHOOL OUTCOMES

School Processes

Measures

Academic Emphasis

Homework was frequently assigned by teachers
Administrators checked that teachers assigned homework
Teachers expected students to pass national exams
Work displayed on classroom walls
Proportion of school week devoted to teaching
Proportion of students reporting library use
Course planning done by groups of teachers

Skills of Teachers

Experienced teachers had higher proportion of time spent on task
Inexperienced teachers in above average schools developed classroom management skills more easily and quickly

Teachers Actions in Lessons

Teachers spent more time on lesson topic
Teachers spent less time with equipment, discipline and handing out papers
Teachers interacted with class as a whole
Teachers provided time for periods of quiet work
Teachers ended lessons on time

Rewards and Punishments

Punishment

Generally recognized and accepted standards of discipline uniformly enforced by leaders

Rewards

Teachers praised work in class
Public praise of pupils in meetings
Display of work on walls

Pupil Conditions

Access to telephone, provisions of hot drinks, etc.
Care and decoration of classroom
Provision of school outings
Students approach staff member about a personal problem
Teachers would see students at any time

Responsibility and Participation

Proportion of students holding leadership positions
Student participation in assemblies
Students participated in charity organized by school
Students brought books and pencils to class

Staff Organization

Teachers planned courses jointly
Teachers said they had adequate clerical help
Administration checked to see that teachers gave homework
Administration aware of staff punctuality
Teachers felt their views were represented in decision making

However, this is not the end of the Rutter story. In addition, Rutter introduces the concept of "ethos" or "climate". Rutter attributes the school's ethos -- style and quality of life -- to the norms and values of the school as a social organization. In explaining the concept of ethos, he takes a second look at the measures which correlate with outcomes and reorganizes them into four areas: (1) group management in the classroom, (2) school's values and norms of behavior, (3) consistency of school values, and (4) pupil acceptance of norms. We will discuss each category and then offer a series of questions based on Rutter's analysis.

Group Management in the Classroom

Rutter's findings in group management in the classroom are included here for two reasons. First, this is one of the few studies which examines both significant aspects of the classroom and significant aspects of the school as a whole. It is Rutter's contention that the social structure of a classroom in effective schools reinforces and supports the norms and values of the school as a whole. This influence, of course, may work in the other direction as well. Second, the Rutter study reinforces many of the findings of the classroom research reviewed by Huitt and Seagers (1980).

Rutter found that children's classroom behavior was much better when the teacher had prepared the lesson in advance, when little time was wasted at the beginning in setting up, when the teacher arrived on time, and when the teacher mainly directed attention to the class as a whole. These findings suggest a lesson-oriented, structured classroom which

begins and ends on time with high student attention to the lesson. Our questions then are:

Do teachers plan lessons in advance?

Does the teacher start the lesson time without interruptions?

Is whole group instruction used?

School Values and Norms of Behavior

Rutter suggests values and norms are communicated and reinforced through the following social mechanisms:

- teachers' expectations about the children's work and behavior
- models provided by teachers' conduct and the behavior of other pupils
- feedback that children receive on what is acceptable performance at school.

We will discuss each in the order in which they appear.

Teachers' Expectations and Standards. In the Brookover *et al.* study we touched upon teacher expectations as a potent indicator of effective schools. Rutter suggests that these expectations can be communicated to students by regularly giving and marking homework, giving students responsibility for bringing books and pencils to class, and providing students with numerous opportunities to exercise leadership. Questions arising from these findings are:

Do teachers expect students to succeed?

Do teachers give homework?

Do students bring books and pencils to class?

Does the social structure of the school and classroom provide opportunities for students to practice leadership?

Models Provided by Teachers. Standards of behavior as modeled by the school's staff also reinforce a school's norms and values. Positive models convey the message that the school is valued because staff attempts to keep it clean and decorated, to begin lessons on time, and to be sensitive to the needs of children, to be giving of their own time to assist them. Negative models show that teachers do not value the school, do not start classes on time, do not spend class time on the lesson, and do not discipline students in ways sanctioned by the school. Questions for assessing a school's effectiveness arising from these findings are:

What models of behavior are provided by teachers?

Does the behavior indicate to students that the teacher values the school and the profession of teaching?

Feedback. The feedback a child receives can also support the norms and values of the school. According to Rutter, "Feedback that a child receives about what is and what is not acceptable at school will constitute a powerful influence on his behavior" (p. 189). Rutter found that praise during lessons happened on the average of three or four times per lesson; however, there were three times as many negative reinforcers. In contrast, the amount of punishment showed only weak, non-significant associations with outcome, while the amount of rewards and praise, particularly during lessons, was associated with better student behavior. Rutter cautions that when giving praise, the currency should be real; the children should have actually performed in a commendable fashion. As we have seen in the Brook-over et al. (1979) study, student success is important not only for its probable effect on student self-concept but also to support the norms and

values of the school. Frequency of rewards may then be one other indication that the social and task structure of the school promotes student success. Questions for assessing schools according to these findings are:

Does the feedback students receive in terms of rewards/praise and punishment support the norms of student success?

Do teachers praise students for work well done?

Do teachers structure the classroom environment to permit students to succeed?

Are punishments delivered in a way so as to indicate form disapproval of misbehavior while avoiding humiliation and avoiding modeling violence?

Consistency of School Values

Rutter's second mechanism for describing a school's social organization is whether the norms and values of a school are consistently held across the school's population. "The 'atmosphere' of any particular school will be greatly influenced by the degree to which it functions as a coherent whole, with agreed upon ways of doing things which are consistent throughout the school and which have the general support of all the staff" (p. 192).

For example, Rutter found better student outcomes in schools where teachers planned courses jointly, where expectations for behavior and discipline were set by the staff as a group, where administrators were aware of staff punctuality and their assigning homework, and where decisions were centralized and staff perceived that their interests were represented in those decisions. He suggests that a school's staff take their cues from administrative behavior and values. This supports studies reported

earlier and reinforces the principal's role in helping to set the norms and values of an institution. Together, the staff and the administration appear to be the ones most influential in developing and maintaining a school's norms and values.

For those who would seek to confirm a school's effectiveness, the following questions may be appropriate:

Have teachers and administrators come to a working consensus on the patterns of acceptable behavior for staff, students, and administration?

Does there appear to be a consensus on how school life is organized?

Are there structured opportunities for staff and administration to develop and reinforce this consensus?

On what issues has consensus been developed, on what issues is consensus emerging, and on what issues is there conflict?

Pupils Acceptance of School Norms

Students must accept the school's norms if the school is to be effective. Rutter suggests three crucial influences in determining this acceptance. The first influence is general conditions for, and staff attitudes toward pupils. This leads to the following questions:

Is the building maintained and decorated to provide pleasant working conditions for students?

Are staff willing and available for consultation by children about problems?

Do staff expect students to succeed and achieve?

Shared activities between staff and pupils, such as out-of-school outings, also contributed to better student outcomes. Rutter posits that these activities may increase effectiveness if the shared activities are directed toward a common goal or purpose, such as a school-wide charity, for example.

A question which reflects this is:

Are there out-of-class activities which bring students and teachers together to build toward a common goal?

Pupil behavior and exam success were also influenced positively when a high proportion of students held positions of responsibility. Rutter hypothesizes that students who hold positions of responsibility are more likely to identify with the educational values of the school and to provide models of mature behavior for others. The following question might be posed.

What proportion of students in a school participate in leadership positions?

To summarize, the Rutter study shows that differences in school outcomes in areas such as academics, attendance, student behavior and delinquency were not just a reflection of a school's intake patterns but were, to a significant degree, determined by school processes and characteristics.

Descriptive Studies of Effective Schools

Recent research findings on effective schools have been indirectly tested in a rather unique way by a group of journalists on a research fellowship at George Washington University's Institute for Educational Leadership. Their reports are compiled in the Ford Fellows in Educational Journalism Report (1979). After an overview of current research, the journalists were asked to visit schools across the country which local communities thought were effective and/or which had higher achievement test scores than would be expected. While journalistic descriptions do not

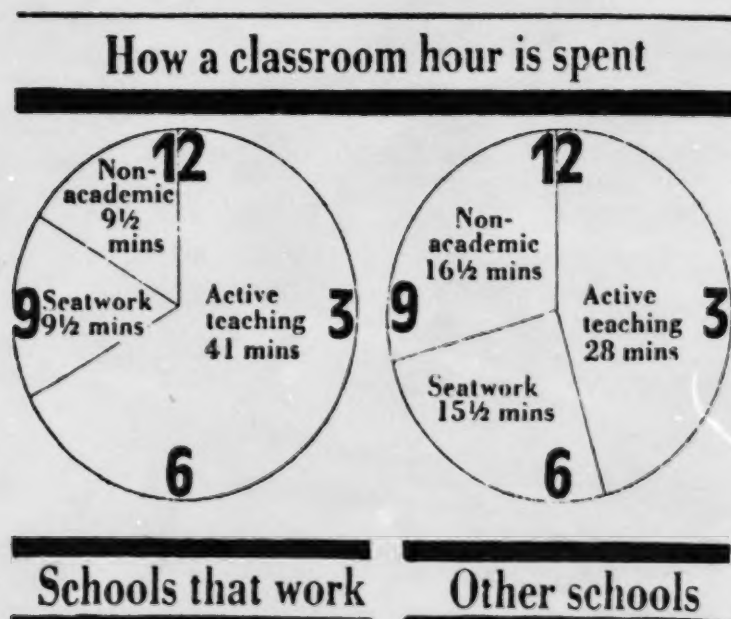
hold the validity and reliability of research data, we think they ring true enough, and are consistent enough with the research, that questions can be posed from their analysis. For the most part, our analysis parallels that of Robert Benjamin of the Cincinnati Post, the writer of one of the articles. Benjamin found that effective schools had similar characteristics in six areas: principals, belief, instruction, teachers, reading and resources. We will describe all but reading and resources since our own analysis of the entire series doesn't support these as major themes for both elementary and secondary schools.

Throughout the articles, the principal emerged as the one who sets focus, tone, philosophy, and direction in a school. "Good principals tend to rock the boat. They forsake the desire to be loved for the hard task of monitoring students' progress. They set achievement goals for their students, and they judge their teachers and themselves by them" (p. 102). Furthermore, they tended to observe classes frequently, to have at least a partial say in hiring teachers, to actively structure curriculum and instructional development, to obtain commitment of the staff to a school-wide program, and to elicit respect from students as a "straight shooter". The articles described both elementary and secondary principals with varying leadership styles. One of the headlines from the articles sums it up, "Principals demand -- and get -- results, but allow flexibility in achieving them" (p. 24).

"Belief" is the second indication of effective schools. "Belief that students can learn -- that the job can be done" (p. 102). It appears from the news articles' descriptions that this belief originates with the

principal and spreads to staff and students. But belief, from our analysis of the articles, goes beyond believing that children can and will learn. Belief also has to do with school focus, philosophy, and goals. The focus of a school could be a particular curriculum program, or an emphasis on community participation, or a successfully desegregated school. But, there has to be a focus -- a belief. As one of the headlines put it, "Good Schools Have Quality Principles."

"Instruction" is the third characteristic of an effective school. Benjamin reports, "Student achievement results from time spent directly and efficiently on teaching academic skills" (p. 102). Task focus, a sense of urgency, and a belief that time is valuable, all characterized effective classrooms. These classrooms appeared more humane places to be than those where there was a lot of off task behavior. The chart below, from the Baltimore Sun, illustrates how a classroom hour is spent.



Sun chart—Dave McElroy

The clocks above, based on logs compiled over two months of observation, show that more time is spent on instruction at "schools that work" (Article on A4).

"Teachers" is the fourth theme mentioned in the articles. In effective schools most teachers believed that children could succeed and had confidence in the principal's ability to lead. Effective teachers were able to maintain discipline in their classes without spending time punishing students; students appeared to understand the rules. Effective teachers planned their lessons in advance. When a teacher needed assistance, appropriate help was available from the principal or from another teacher. Effective teachers expected their students to learn and were able to structure their classroom, using whole group teaching techniques, to fulfill their expectations. In effective schools teachers handled most discipline problems themselves and rarely sent children to the principal's office. Furthermore, teachers cared for the students, took a sense of pride in teaching, and were relatively satisfied with teaching in a particular school. Effective schools usually did not have a transient teaching staff. The reporters did not paint rosy pictures of all "effective schools", however. Some effective schools still had problems in discipline (although most reported improvement), apathy, lack of student motivation, poor community relations, and large and insensitive bureaucracies. They did, however, appear to be moving toward a set direction.

The journalists' descriptions suggest the following questions about effective schools.

Does the principal actively set the tone and focus of the school by observing classrooms, enforcing the discipline code in a "fair but firm" manner, and setting goals for the school which are supported by the staff?

Does the school have a focus (a philosophy), a direction which is supported by administrative staff and students?

Is time spent efficiently and directly on teaching academic skills?

Do teachers have infrequent discipline problems? Do they usually handle their discipline problems themselves?

Summary and Conclusions

Over the course of this paper we have posed a number of questions to determine a school's effectiveness. Both New Jersey and Delaware have asked similar questions in their school improvement programs. In this section we group the questions into categories, then summarize each category with one or two key questions. Next, we bring together the various categories to create a picture of the whole. We recognize that others may group the questions differently (and we would encourage you to take a stab at such an exercise). Our purpose is not to determine the critical categories of school effectiveness for all time. Rather it is to be as explicit as possible about the way in which the data made the most sense -- for us, now. Questions are organized into the following categories: indicators of effectiveness, social processes, and beliefs.

Indicators of Effectiveness

Indicators of effectiveness are divided into two sets -- school and classroom. The following questions apply here.

Indicators of Effectiveness

School Level

- Does the school have a focus (a philosophy), a direction, which is supported by administration, staff and students?
- Do teachers and principals support the academic focus of the school by spending most of the school day on instructional activities?
- Does the principal provide a reliable system of support, appropriate inservice training for staff and opportunities for staff to coordinate their actions in the areas of instruction and discipline?
- Does the principal regularly observe classrooms and confer with teachers on instructional matters?
- Do teachers have extensive contact with a limited number of students in several aspects of their education?
- Are there out-of-class activities which bring students and teachers together to build toward a common goal?
- What proportion of students in a school participate in leadership positions?
- Is the building maintained and decorated to provide a pleasant working condition for students?
- Are staff willing and available to be consulted by children about problems?

Classroom Level

- Do students master the academic work?
- Do students feel the school helps them master the academic work?
- Is time spent efficiently and directly on teaching academic skills?
- Do teachers plan lessons in advance?
- Do students bring books and pencils to class?
- Does the teacher start the lesson on time without interruptions?
- Is the whole group instruction used when appropriate to the lesson plan?
- Do teachers give homework?
- Do teachers provide rewards for actual achievement?
- Do teachers praise students for work well done?
- Do the teachers have infrequent discipline problems?
- Do they usually handle their discipline problems themselves?

The questions suggest two themes. Those under classroom indicators point toward a classroom task or academic focus. Schools which are effective tend to spend more time on task. It is the teacher, as the leader within the classroom, who establishes the task focus by: planning lessons in advance, starting on time, praising work well-done, and assigning homework. All of these specific actions support the academic or task focus of the class. The questions under school indicators suggest the second theme: the principal supports a school's academic focus and the efficient use of

available instructional time. Schools' leaders -- the administration and teachers -- actively demonstrate that focus in their actions. Other activities which bring school participants together outside of the classroom may also be in the principals' domain to establish and maintain.

Social Processes

The specific indicators are important only insofar as they point to social processes which hold the school together as an institution. This leads then, to another category of questions. These questions suggest that the social processes of a school be divided into three categories: consensus building, modeling and feedback. These processes are not as easily observed as the specific indicators of effectiveness, such as teachers giving homework, yet, they are more central to what makes a school effective.

Models. One theme suggested by research is that school leadership -- administration and faculty -- model appropriate behavior. The dominant model in a school is the principal; the behavior he or she models will affect others in the school.

Models

Key Questions

Is the social structure of the school organized to provide models of appropriate behavior, attitudes, beliefs?

Does the principal take an active role in structuring and maintaining the school's instructional program and disciplinary procedures?

Questions Stimulated by the Research

What models of behavior are provided by teachers?

Does the behavior indicate to students that the teacher values the school and the profession of teaching?

Are there structured opportunities for staff and administration to develop and reinforce consensus?

Does the school have a focus (a philosophy), a direction which is supported by administration and staff?

Does the principal emphasize academic standards?

Is there little differentiation among students or in the instructional program provided for them?

Does the social structure of the school and classroom provide opportunities for students to practice leadership?

Do students perceive congruence among the faculty in enforcing school rules and strictly controlling classroom behavior?

Does the principal actively set the tone and focus of the school by observing classrooms, enforcing the discipline code in a "fair but firm" manner, and set goals for school which is supported by the staff?

Are punishments delivered in a way so as to indicate firm disapproval of misbehavior while avoiding humiliation and avoiding modeling violence?

The research reviewed suggests that the principal, as a model, influences a school's academic emphasis and discipline policy. The questions also indicate that positive student models and opportunities for student leadership contribute to the modeling process. (Models from the home environment may also contribute--although not directly suggested by the research reviewed here.) The summary questions, then, emphasize opportunities to model appropriate behavior and exercise leadership potential, especially at the principal level.

We have dealt rather extensively with the role of the principal. At present, there are very few studies which deal with characteristics of superintendents and/or central office staff, and these actors may have a significant effect on the way principals manage their buildings. In fact, a recent study found that:

Only one variable tested in the study was found to be significantly related to the amount of time devoted to curriculum development by elementary principals: the principal's perception of the importance of the function of curriculum development to central office superiors... Principals allocated their time to virtually all functions according to the priority of those functions they perceived to be held by their superiors (Vann, 1979, p. 405).

The role of superintendent, particularly in small and medium size districts, may be as important for the district as the principal's leadership is for a school, especially given the research findings on the importance of leadership at the classroom and school levels.

Feedback. The school, like all organizations, provides feedback to participants: feedback that supports and recognizes success, feedback that has consistency, feedback that has the support of various groups in the school. Key questions from research are found on the following page.

Key Questions

Does feedback to school participants on leadership initiative, rewards and punishment support success?

Is the feedback perceived as congruent by school participants?

Feedback

Questions Stimulated by the Research

What are the varieties of ways that students can be rewarded and are the rewards earned by a large number of students?

Do students perceive that discipline is unfairly administered?

Does the feedback students receive in terms of rewards/praise and punishment support the norms of students success?

Do teachers praise students for work well done?

Do teachers structure the classroom environment to permit students to succeed?

Do teachers provide rewards for actual achievement?

Does faculty express punitive or authoritarian attitudes toward students?

Are punishments delivered in a way so as to indicate firm disapproval of misbehavior while avoiding humiliation and avoiding modeling violence?

Do students perceive congruence among the faculty in enforcing school rules and strictly controlling classroom behavior?

Does the principal provide a reliable system of support, appropriate inservice training for staff, and opportunities for staff to coordinate their activities in the areas of instruction and discipline?

That feedback supports success appears obvious. Yet in many of the ineffective schools covered by case studies, observers found students rewarded for incorrect answers. In addition, they found that when students gave correct answers there was no reward extended. Similarly, Rutter found that there was at least three times as many negative reinforcers in the school environment as there were positive ones. Positive feedback to students is associated with better student outcomes if the feedback is for a task well-done.

In addition, school feedback needs to be consistent. Also it must be interpreted in the same way by all school participants. This is true of feedback on a school's academic focus, as well as on its disciplinary procedures. It appears that the principal, again, takes the leadership role in defining and implementing disciplinary procedures so that most students feel they are being treated fairly.

Consensus. Providing appropriate and consistent models and feedback helps develop a consensus within the school. It appears that where there is evidence of a consensus, school outcomes are better. The academic focus of the school and the school's disciplinary actions form the content of the consensus process. We again note the pivotal function of the principal in developing this consensus. For example, in the Safe Schools Study, in schools with fewer than expected incidents of violence and vandalism, principals were able to form a consensus between administration and faculty about both the focus of the instructional program and the disciplinary policies and procedures. It is interesting to note that students were not necessarily involved in developing either. Rather when students perceived the results of faculty-administration consensus on academics and discipline to be fair, firm, and consistent, school outcomes were better than expected. The following chart groups the questions which concern consensus.

Consensus

Key Questions

Has a consensus developed around patterns of acceptable behavior and around the academic emphasis of the school?
Does the school have a focus which enlists the participation and commitment of administrators, teachers, and students?

Questions Stimulated by the Research

Does the school have a focus (a philosophy), a direction which is supported by administration, staff and students?
Does the principal have a purpose in mind when running the school?
Has the principal built shared expectations and strong coordination about school rules?
Does there appear to be a consensus on how school life is organized?
Do students perceive that discipline is unfairly administered?
Are there out-of-class activities which bring students and teachers together to build toward a common goal?
Are there structured opportunities for staff and administrators to develop and reinforce consensus?
Do the school's personnel believe and expect students to learn and succeed?
Have teachers and administrators come to a working consensus on the patterns of acceptable behavior for staff, students and administration?
Do students perceive congruence among the faculty in enforcing school rules and strictly controlling classroom behavior?
On what issues has consensus been developed, on what issues is consensus emerging, and on what issues is their conflict?
Does the principal actively set the tone and focus of the school by observing classrooms, enforcing the discipline code in a "fair but firm" manner, and set goals for the school which is supported by the staff?

Beliefs

We assume that the beliefs people hold about the world and the meaning which they ascribe to events are powerful predictors of their actions (Kelley, 1955). In this case, we highlight two of the beliefs research has

shown to be correlated with student achievement: students believe that what they do will affect their future, and teachers believe and expect children to succeed. Below is a chart which lists the questions from the research.

<u>Key Questions</u>	<u>Beliefs</u>
Are expectations for success reinforced in routines of administrators, teachers and students?	Do students believe that luck is more important than hard work?
Do people in the school believe they can affect their future?	Do students believe that they can get ahead without something or someone stopping them?
	To what extent do students, faculty, administration and the community feel that their own efforts govern their future?
	Does the social structure of the school teach those who live there that their actions have some effect?
	Do principals and teachers believe and expect that students can master their academic work?
	Do teachers expect students to succeed?
	Do staff expect students to succeed and achieve?
	Do the school's personnel believe and expect students to learn and succeed?

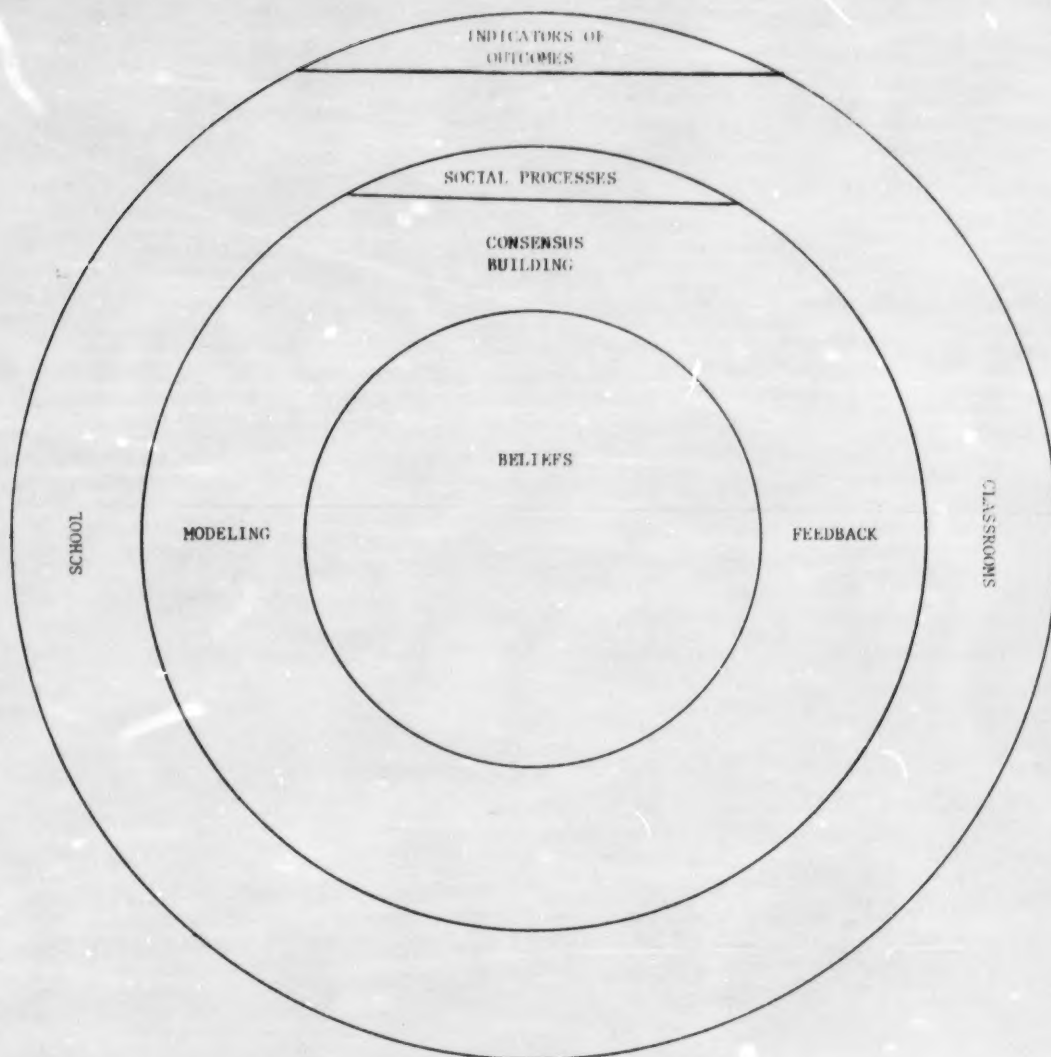
These findings suggest that one of the most important school outcomes is students' beliefs that their action can affect their future, and one of the most important school processes is that teachers demonstrate within the classroom that they believe each child can succeed. For example, if teachers believe that all of the students in their classroom will succeed in passing the grade, learning to read, or graduating high school, then it appears that the teacher is more likely to structure the environment in accordance with that expectation. If a teacher does not believe students

can learn, then the teacher may "appear to act like consulting physicians who have been brought in to advise dispassionately on a very difficult, perhaps hopeless case" (Benjamin, 1979, p. 102).

A Model of School Processes

The three major categories of questions -- indicators of effectiveness, school processes, and beliefs, when integrated into a whole, suggest to us the model on the following page. On the outer circle we place our indicators of effective schools. These indicators, at the lowest level of generality, provide us with concrete measures for assessing a school's effectiveness. They gain power, however, to the extent that they point to the existence of the three social processes in the middle circle. The indicators give hints as to how well these social processes may be working.

The social process category tends to focus on two content dimensions: academic emphasis and student behavior. These two content dimensions are recurring themes on which the social processes of feedback, modeling, and consensus building are based. Finally, our model suggests that interacting with the social processes of effective schools are a set of common beliefs that school participants hold about themselves, each other, and their capability of acting within the school's social setting. Thus, the center circle contains beliefs. Students' beliefs about their own efficacy and teachers' expectations of students are two central beliefs which emerge from the research. There may be others.



A Model of Beliefs and Processes
Which Influence School Outcomes

We pose this model as a way of looking at characteristics of effective schools. It encourages us not to focus on indicators, social processes or beliefs as isolated phenomena. Rather, it encourages us to consider the dynamic processes by which school participants develop and maintain a consensus about the school's purpose, model appropriate behavior, receive appropriate and consistent feedback on academic and disciplinary matters, and hold beliefs and expectations of a successful future.

A Note of Caution

Research provides one perspective by which we can view the complex phenomenon of schooling; but it is only one perspective. Policymakers, school administrators, and teachers have other perspectives equally valuable. Social research is like history; it attempts to use the past as an explanation to inform the future. It purports general truths which may or may not inform particular situations. This is why we have used the research findings reviewed to pose questions, not to suggest answers. However, we do believe that the answers to those questions will describe most of the important aspects of school processes. Social research as history does not suggest specific answers for any given school. It does not suggest how a school should change. It does suggest where to look for the data on which to base decisions about changing (or remaining the same). The art of changing a school or maintaining the status quo remains the creative challenge of school leaders.

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